



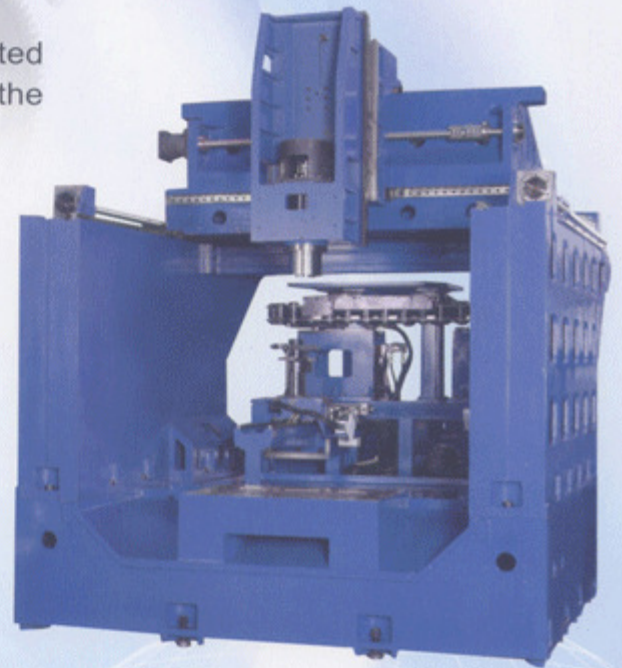
GMC





GMC series

Gantry type machining center features :

- This machine is designed with a movable crossrail beam and fixed table. This strong design allows heavy working parts to be loaded on the fixed table, reliable high accuracy is assured under all cutting conditions. High rapid movement of the axis is obtained with this special machine design.
- The box type design is used on the machine base which is made of high grade Meenhanite cast iron, it minimizes the cutting vibration during high speed, and ensures the machining stability
- The slideways are fitted with high rigidity roller type linear guide way, this design greatly increases the speed in rapid traverse and rigidity.
- Y-axis slideways is driven by twin drive simultaneously to provide the maximum cutting feed rate.
- Machine type (A, A+C, S, T table) can be selected depending on the production requirements and meet the different of applications.



Machine Structure 

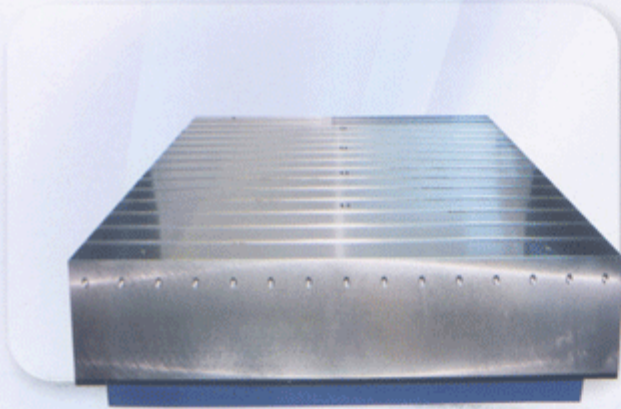
Machine Layout 

GMC 1400 A

- T : Fixed table
- S : Swing table
- A : A axis rotary table
- A + C : A axis rotary table+C axis rotary table

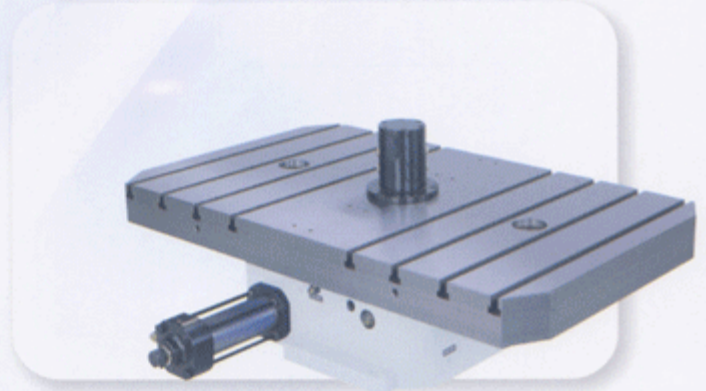
- X-axis travel
- Gantry type machining center

▶ T : Fixed table



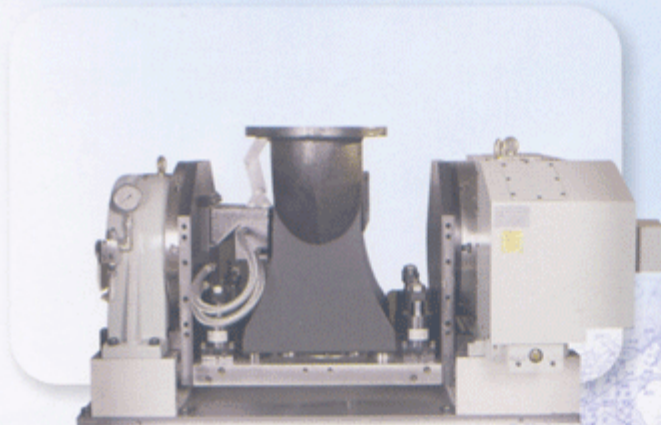
3 axes machine with fixed table design is suitable for mould machining

▶ S : Swing table



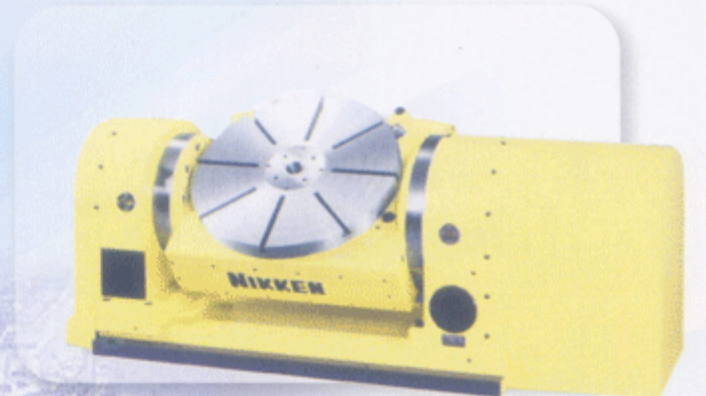
It provides fast work-piece changing to save the time of loading & unloading and reduces the machining cost

▶ A : A axis rotary table



It increases the machining capacity to meet the customer's requirement

▶ A+C : A axis rotary table+C axis rotary table



It is suitable for aerospace parts machining and achieves the best machining precision

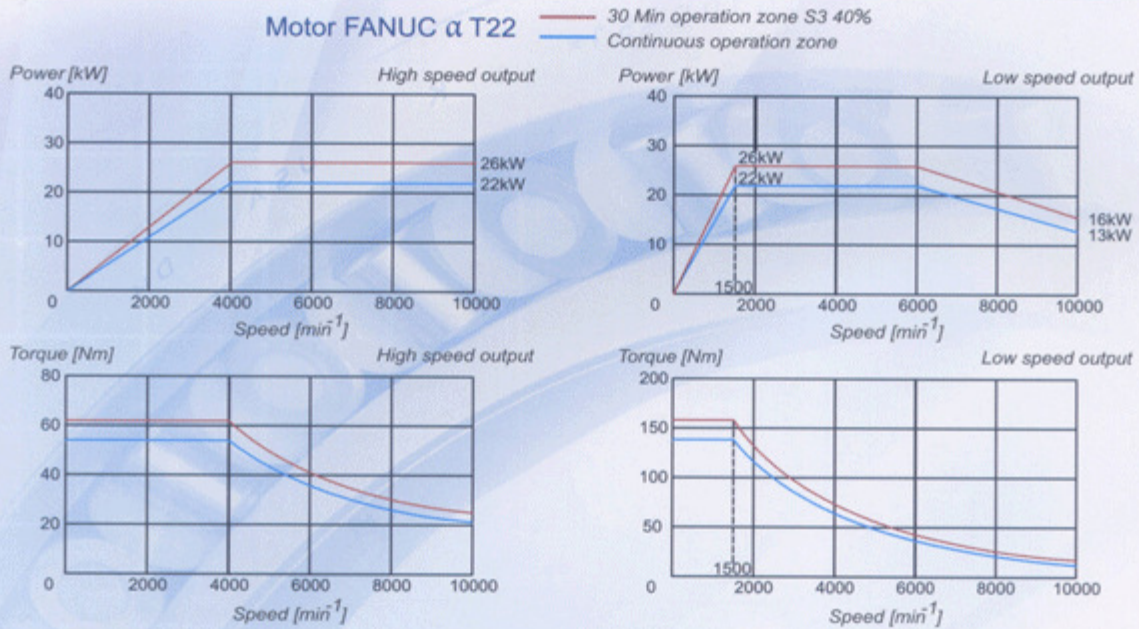


GMC series

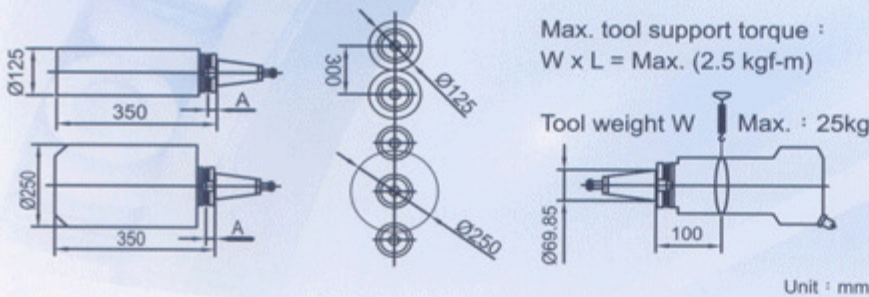
Advantage for high rigidity coupling transmission

- Disperse the heat transmitted to the spindle
- High rigidity and heavy construction
- Less breakdown and ease of design
- Ease of maintenance and the cost saving

Torque Diagram



Max. Tool Dimension

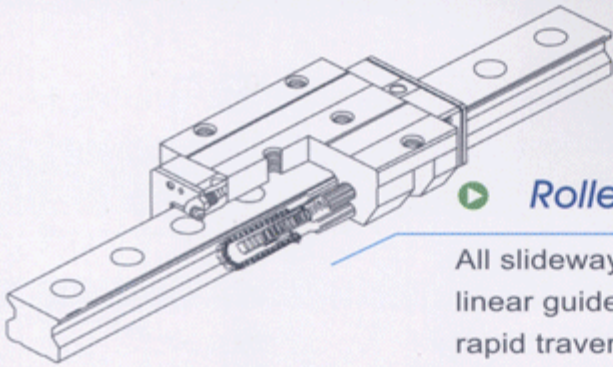


	BT-50	CAT-50	ISO-50
Max. tool length(mm)	350		
Max. tool diameter(mm)	Full tool(Ø125) Adjacent tool empty(Ø250)		
Dimension(A)(mm)	23.2	11.1	11.1
Max. tool weight(kg)	25		
Max. tool support torque(kgf-m)	2.5		



Oil cooler

Keep the constant temperature at high speed running, it controls effectively thermal displacement of the spindle and ensures the high speed accuracy.



▶ **Roller type linear guide way**

All slideways have roller type re-circulating high precision linear guide way. This design greatly increases speed in rapid traverse and rigidity.

▶ **High precision slideways**

Y-axis slideways is driven by twin drive simultaneously to provide the maximum cutting feed rate

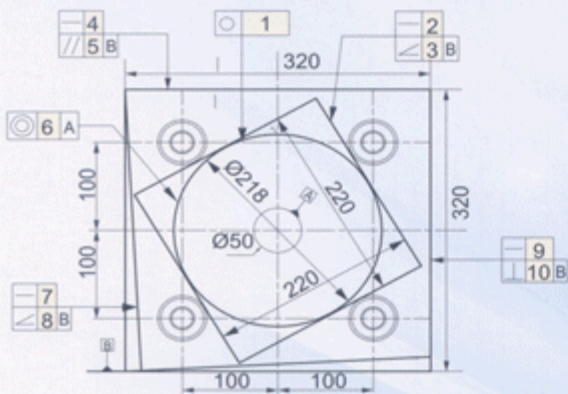


▶ **Double walled structure**

The box type design is used on the machine base which is made of high grade Meenhanite cast iron, it minimizes the cutting vibration during high speed, and ensures the machining stability



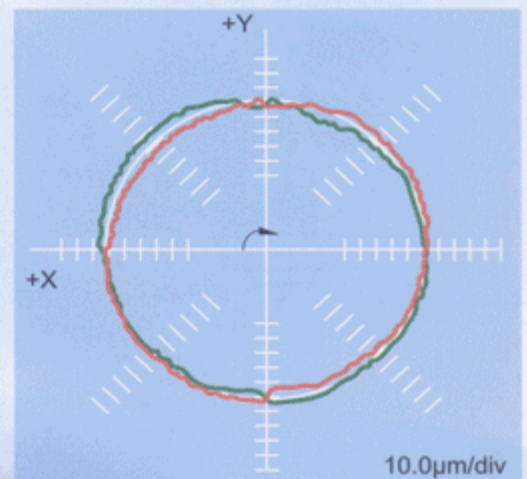
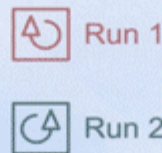
▶ **Machining Accuracy (Part material: Cast iron)**



NO	ITEM	JIS standard
1	Roundness	0.02
2	Straightness	0.015
3	Gradient	0.02
4	Straightness	0.015
5	Parallelism	0.02
6	Concentricity	0.025
7	Straightness	0.015
8	Gradient	0.02
9	Straightness	0.015
10	Squareness	0.02

Unit : mm

▶ **Dynamic ball bar test**



ISO standard : 30µm

Measured Value

Roundness : 14.8µm

Max. deviation : 7.8µm 57°

Min. deviation : -7.0µm 265°

Test Parameter

Diameter : 200mm

Feedrate : 500mm/min

Start angle : 0°

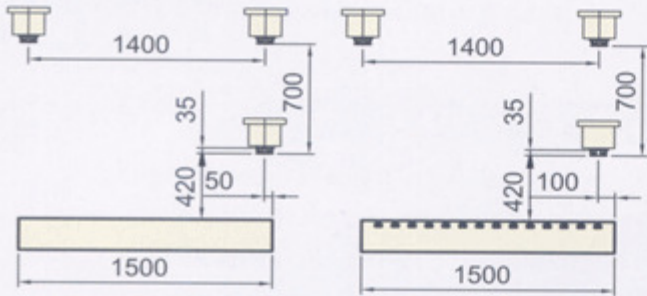
End angle : 360°



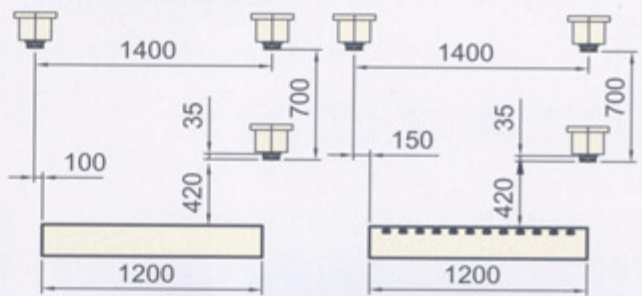
GMC series

GMC 1400 Machining Range

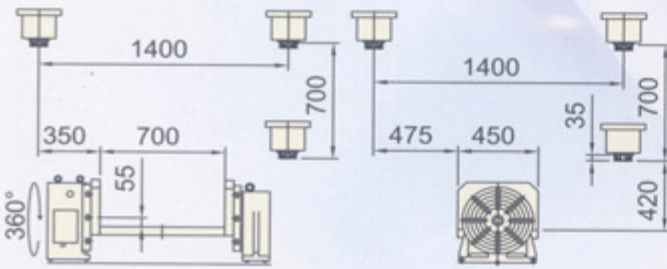
GMC1400T



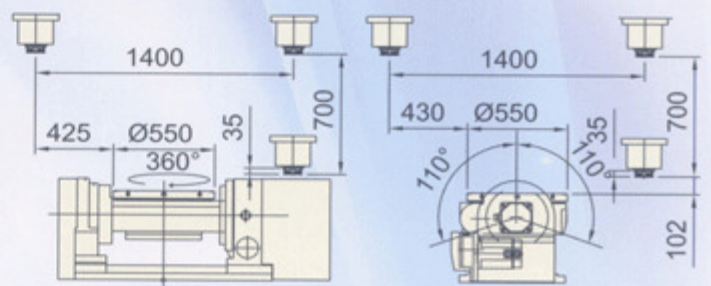
GMC1400S



GMC1400A

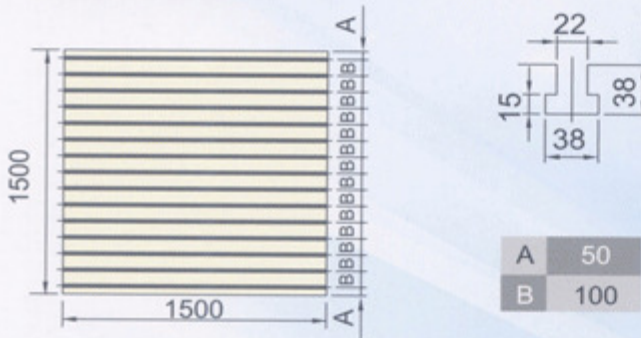


GMC1400A+C

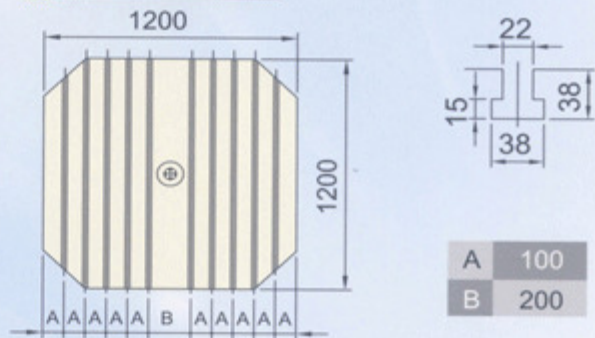


GMC 1400 Table Dimension

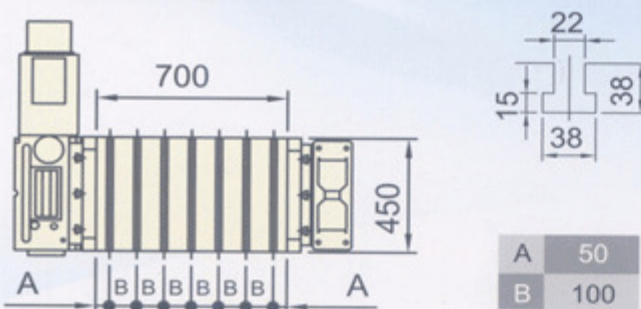
GMC1400T



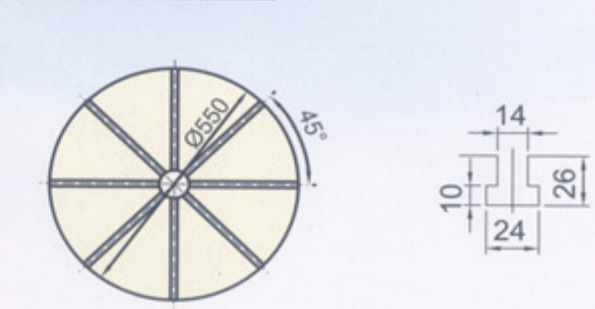
GMC1400S



GMC1400A



GMC1400A+C



Machine Specifications

ITEM	UNIT	Specification			
		GMC1400T	GMC1400S	GMC1400A	GMC1400A+C
Model					
Table dimension (length x width)	mm	1500 x 1500	1200 x 1200	700 x 450	Ø550
Dimension of T-slot	mm	22 x 100 x 15	22 x 100 x 10	22 x 100 x 7	14 x 45° x 8
Travel					
X-axis travel	mm	1400			
Y-axis travel	mm	1400			
Z-axis travel	mm	700			
Distance from table surface to spindle nose	mm	420~1120			102~802
Distance between columns	mm	2100			
Spindle					
Max. spindle speed	min ⁻¹	10,000			
Spindle taper		BT50			
Spindle bearing inner diameter	mm	Ø100			
ATC					
Number of tools		32			
Max. tool weight	kg	25			
Max. tool diameter	mm	Ø125 (adjacent tool empty Max Ø250)			
Max. tool length	mm	350			
Feed rate					
X-axis rapid traverse	m/min	30			
Y-axis rapid traverse	m/min	30			
Z-axis rapid traverse	m/min	20			
Cutting feed rate	mm/min	1~12,000			
Manual feed rate	mm/min	0~3600			
Motor					
Spindle motor	kW	22/26 (αT22/10000i)			
X-axis servo motor	kW	4.0 (α22/3000i)			
Y-axis servo motor	kW	4.0 (α22/3000i)			
Z-axis servo motor	kW	7.5 (α30/3000i)			
Coolant pump	kW	1.5			
Power capacity	KVA	60			
Tank capacity					
Lubrication tank	L	8			
Coolant tank	L	1050			
Machine dimension					
Machine height	mm	4300			
Floor dimension	mm	3950x5100			
Machine weight	kg	20,000			

Standard Accessories

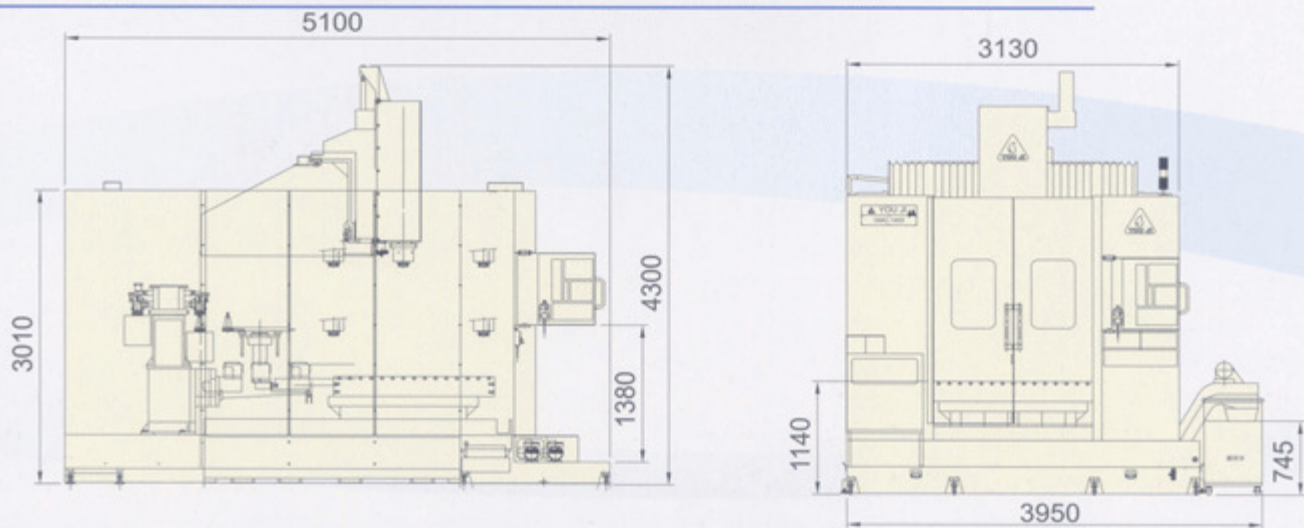
- FANUC 18i-M controller
- Steel belt type chip conveyor
- Coolant unit
- Coolant cooler
- Hydraulic unit
- Completed full guarding
- Pressure relief automatic lubrication system
- Protection covers for slideways
- Tool box
- Signal tower (3-stage)
- Working lamp

Optional Accessories

- SIEMENS 840D controller
- Linear scales for X,Y,Z-axis(Fagor)
- Linear scales for X,Y,Z-axis(Heidenhain)
- Coolant through spindle system
- Scraper type chip conveyor
- Coolant system around the spindle
- Oil skimmer
- Coolant gun
- Paper filter
- 40,60,80,120 tools ATC
- 90° milling head
- Spindle air blast system
- Air conditioner for electrical cabinet
- Oil mist collector
- Work-piece probe
- Tool presetter
- Transformer
- Rigid tapping
- CE Mark
- Door interlock

Specification is subject to change without prior notice

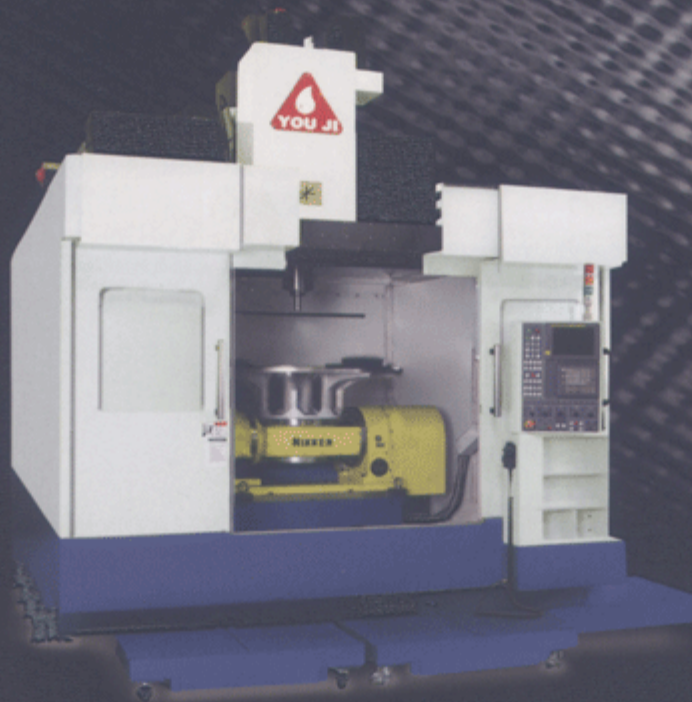
Machine Layout Dimension





Product Range

- CNC Vertical Turning Lathe
- CNC Horizontal Turning Lathe
- CNC Vertical Machining Center
- CNC Horizontal Machining Center
- NCSpecial Purpose Machine Automatic Production Line



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